



NASA Explorer Schools Pilot Orientation

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NASA Explorer Schools Vision

Actively engaged schools and partners delivering unique and authentic NASA experiences that inspire middle and high school students' interest in STEM disciplines today, tomorrow, and beyond



NASA Explorer Schools Mission

To be the Agency's classroom-based gateway to middle and high school students inspiring them to participate in NASA missions and develop their aptitudes in STEM interests in related careers





The NES Project is intended to serve as NASA's gateway to STEM resources and opportunities by providing...

Key Attribute	Description
Open Access	<ul style="list-style-type: none">• Designed for broad participations• No application process• Materials accessible to all types of schools (public, charter, private, urban, rural)
Flexibility	<ul style="list-style-type: none">• Allow for whole school engagement or individual teacher participation• Offers multiple pathways for participation• Recognition is provided based upon user outputs and participation levels
High Quality Student Engagement around NASA Missions	<ul style="list-style-type: none">• Identification of most effective, relevant, and user friendly resources• Clear, concise, focused support around resources
Primary Access Point to NASA Pipeline	<ul style="list-style-type: none">• Align project offerings to funnel students and teachers to higher education, K-12 and Mission sponsored opportunities, products and content



Pilot Features

Feature	Approach
Curriculum Support Materials	Menu of Content: The pilot features 8 educator products that contain lessons and opportunities designed around using NASA's mission of research and discovery as a context for learning. Lessons focus on Earth and Space Science, Physical Science and Engineering Design
Electronic Professional Development	Virtual Campus: A variety of instructor led and self-guided professional development is offered around each product. A blogging tool is used to provide updates, share best practice and allow for discussion on product usage
Student Interaction and Engagement with NASA workforce	Weekly digital programming focused on current NASA research offers a window into the real world application of STEM concepts in NASA. Streaming Video and chat functionality connects students and NASA subject matter experts



NES Pilot Expectations

- Window of Opportunity: March 1 and June 11, 2010.
 - You are free to participate in resources based upon your interest and availability
 - Some NES opportunities will only be offered a handful of times and others are available throughout the run of the pilot
- We ask that you participate in each of the following experiences:
 - Educational Products
 - Electronic Professional Development
 - Virtual Breaking News Events
 - NES Blog
 - Evaluation Surveys



NES Educational Products

Use at least one of the following products with your students

- Products will not exceed more than 2-3 class periods to implement with students

Middle School:

NASA Educational Product	Standard
Earth Climate Course	Earth and Space Science
Lunar Nautics	Earth and Space Science, Physical Science, Engineering Design
Engineering Design Challenge: Plant Growth Chamber	Engineering Design
Smart Skies	Physical Science/Math

High School:

NASA Educational Product	Standard
MY NASA Data	Energy in Earth System
Rocket Guide	Physical Science, Engineering Design
Black Hole Math	Physical Science/Math
Cooling with Sunshades	Engineering Design



Electronic Professional Development

Participate in at least one form of Professional Development for the product(s) you have selected

- An hour-long training session has been developed for each education product
 - Provides background information and tips on how to implement the lesson
- Live Instructor Led Sessions will be provided during the 1st two weeks in March
- Self-guided archives available on demand will be posted starting in the third week in March
- Additional instructor led sessions will also be available in late April
- Follow-up questions and support for all products will be delivered through the NES Blog



Virtual Breaking News Events

Participate in at least one Virtual Breaking News Event with Students

- Virtual Breaking News events allows students to learn first hand about NASA's mission of research and discovery directly from our scientists and engineers.
- These events will feature discussion on the findings, key milestones and technology behind NASA's research in Earth and Space Science, Human and Robotic Space Exploration and Aeronautics Research.

Event Type	Description
Webcast	30 minute discussion and interaction with NASA scientist or researcher delivered through streaming video
Chat	Direct interaction with subject matter expert using chat tool based on student interest around topic
Culminating Experience	30-45 minute interaction around a lesson plan in which students have participated. Lessons will be posted in advance, event will feature samples of student work and comparisons with NASA research



NES Blog

Periodically review NES Blog and provide feedback or discuss experiences as appropriate

- NES Blog provides project news and updates
- Allows for collaboration through threaded discussion on use of products, resources and opportunities
- Provides follow-up information on Breaking News and E-PD events
- Provides forum for discussion around current STEM education topics and concerns



Evaluation Surveys

- **Student Interest Pre and Post Test Survey**
 - Surveys will be administered at beginning and end of pilot run
 - Scantron sheets and self-addressed envelope will be mailed to you (Pre-Test's mail in third week of March)
- **Teacher Phone Interviews**
 - 30 minute phone interviews will be conducted during pilot run
- **Post Event Survey**
 - After completion of virtual campus events a brief survey capturing your initial impressions is available
- **Research Center Tour and Focus Group**
 - Tentatively scheduled for July 7-9
 - Open to one representative per school
 - Contingent upon participation and completion of survey elements
 - All expenses paid by NASA



Thank You For Your Support!

Questions, Comments: nasa-explorer-schools@mail.nasa.gov